UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,814	05/27/2005	Robert Mark Stefan Porter	282544US8XPCT	6632

22850 7590 12/27/2007		EXAMINER
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.		HANNE, SARA M
1940 DUKE STREET		
ALEXANDRIA, VA 22314	ART UNIT	PAPER NUMBER
	2179	

NOTIFICATION DATE	DELIVERY MODE
12/27/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/536,814	PORTER ET AL.
	Examiner	**Art Unit**	
	Sara M. Hanne	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 July 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-5 and 15-20</u> is/are rejected.

7)☒ Claim(s) <u>6-14</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 May 2005</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5/27/05</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-20 are pending in this application.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3.   The information disclosure statement (IDS) submitted on 5/27/05 has been considered by the examiner.

Drawings

4.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Ref. 460 of Fig. 10, Ref. 565 of Fig. 14 and Ref. 1330 of Fig. 26. These appear to have been inadvertently excluded from the specification. For example, it seems that Par. 216 refers to the Shot Boundary as Ref. 560, and is merely a typo meant to be 565. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5.   Claims 6-14 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 16, 17 and 19 rejected under 35 U.S.C. 101 because the claimed inventions are directed to non-statutory subject matter.

Claim 16 fails to fall within a statutory category of invention. It is directed to the program code itself, not a process occurring as a result of executing the program code, a machine programmed to operate in accordance with the program code, a composition of matter, nor a manufacture structurally and functionally interconnected with the program code in a manner which enables the program to act as a computer component and realize its functionality. Therefore, it is non-statutory under 35 USC 101.

Claim 17 fails to be limited to embodiments that fall within a statutory category of invention. In Claim 17 the "providing medium" can be interpreted as "a transmission medium" as evidenced by Claim 19 and therefore is not statutory.

Claim 19 fails to fall within a statutory category of invention. A "transmission medium" does not constitute a manufacture nor does it fall within any of the other three statutory categories.

While "functional descriptive material" may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a signal or transmission media embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, a signal or transmission media is a form of energy, in the absence of any physical structure or tangible material. Thus, the claim is not limited to statutory embodiments. See MPEP 2106.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

the subject matter of the various claims was commonly owned at the time any

inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the examiner to consider the applicability of

35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35

U.S.C. 103(a).

10.   Claims 1-5 and 15-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Snook, US Patent 6400378, and further in view of Dufaux, US

Patent 6711587.

As in Claim 1, Snook teaches a media handling system in which candidate

video sequences are displayed on a display screen in schematic form for

selection by a user (Fig. 3 and corresponding text), the system comprising: a

display screen for displaying representations of the candidate video sequences

for selection by a user (ref. 120), each representation including one or more

images derived from the respective video sequences (Col. 2, lines 64-66); and a

user control for defining a set of one or more of the video sequences (Col. 2, line

55-Col. 3, line 1). While Snook teaches displaying video sequences, represented

by a keyframe thumbnail, that may be for selected by a user to define a set of

one or more video sequences, they fail to show the means for detecting human

faces in the candidate video sequences to represent the candidate video

sequences as a keyframe as recited in the claims. In the same field of the

invention, Dufaux teaches a media handling system similar to that of Snook. In addition, Dufaux further teaches means for detecting human faces in the candidate video sequences (Fig. 5, ref. 500 and corresponding text); and assigning them as the key frame representations of the candidate video sequences (Col. 4, lines 4-7). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences taught by Snook to include the means for detecting human faces in the candidate video sequences and assigning them as the key frame representations of the candidate video sequences of Dufaux, in order to obtain means for detecting human faces in candidate video sequences, displaying video sequences, represented by an image representing human faces derived from the respective video sequences, that may be for selected by a user to define a set of one or more video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

As in Claim 2, Snook teaches the set of one or more of the video sequences is an ordered edited set forming an output media product (Col. 2, lines 62-64).

As in Claim 3, the above combination of Snook and Dufaux teach the system of Claim 1 as rejected *supra*. Snook further teaches a further ordered

representation of a group of at least a subset of the video sequences forming the output media product (Snook, Col. 8, lines 2-3). Snook fails to explicitly teach images representing human faces derived from the respective video sequences in the group. Dufaux teaches detected human faces represent their respective video sequences (Dufaux, Col. 4, lines 4-7). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences and a further ordered representation of a group of at least a subset of the video sequences forming the output media product taught by Snook to include the means for detecting human faces in the candidate video sequences and assigning them as the key frame representations of the candidate video sequences of Dufaux, in order to obtain a further ordered representation of a group of at least a subset of the video sequences forming the output media product, the video sequences represented by an image representing human faces derived from the respective video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

As in Claim 4, Snook teaches the ordered representation is a timeline representation ("video timeline", Col. 6, line 29), providing an ordered representation of the group of video sequences forming the output media product

along a generally rectilinear path on the display screen (Fig. 6A and

corresponding text).

As in Claim 5, Snook teaches which the ordered representation may be

scaled so as to vary the proportion of the video sequences forming the output

media product which are currently displayed in the ordered representation (Fig.

6A ref. 625 and corresponding text).

As in Claim 15, Snook teaches a method of media handling system in

which candidate video sequences are displayed on a display screen in schematic

form for selection by a user (Fig. 3 and corresponding text), the method

comprising the steps of: displaying on a display screen representations of the

candidate video sequences for selection by a user (ref. 120), each representation

including one or more images derived from the respective video sequences (Col.

2, lines 64-66); and providing a user control for defining a set of one or more of

the video sequences (Col. 2, line 55-Col. 3, line 1). While Snook teaches

displaying video sequences, represented by a keyframe thumbnail, that may be

for selected by a user to define a set of one or more video sequences, they fail to

show the means for detecting human faces in the candidate video sequences to

represent the candidate video sequences as a keyframe as recited in the claims.

In the same field of the invention, Dufaux teaches a media handling method

similar to that of Snook. In addition, Dufaux further teaches means for detecting

human faces in the candidate video sequences (Fig. 5, ref. 500 and

corresponding text); and assigning them as the key frame representations of the

candidate video sequences (Col. 4, lines 4-7). It would have been obvious to

one of ordinary skill in the art, having the teachings of Snook and Dufaux before

him at the time the invention was made, to modify displaying video sequences,

represented by a keyframe thumbnail, that may be for selected by a user to

define a set of one or more video sequences taught by Snook to include the

means for detecting human faces in the candidate video sequences and

assigning them as the key frame representations of the candidate video

sequences of Dufaux, in order to obtain means for detecting human faces in

candidate video sequences, displaying video sequences, represented by an

image representing human faces derived from the respective video sequences,

that may be for selected by a user to define a set of one or more video

sequences. One would have been motivated to make such a combination

because a way for the system to select a more relevant, user friendly

representative image would have been obtained, as taught by Dufaux.

As in Claim 16, Snook teaches computer software having program code

(Snook, Col. 2, lines 58-60) for carrying out the method of Claim 15 (See Claim

15 rejection *supra*).

As in Claim 17, Snook teaches a providing medium (Snook, Fig. 2 and

corresponding text) for providing program code according to claim 16 (See Claim

16 rejection *supra*).

As in Claim 18, Snook teaches the medium being a storage medium

(Snook, Fig. 2 and corresponding text).

As in Claim 19, the above combination of Snook and Dufaux teach the

method of Claim 15 as rejected *supra*. Snook fails to explicitly teach a

transmission medium for providing program code. Dufaux teaches the computer

readable medium capable of being a transmission medium (Col. 13, lines 65-67).

It would have been obvious to one of ordinary skill in the art, having the

teachings of Snook and Dufaux before him at the time the invention was made,

to modify the providing medium of Snook to include the transmission medium of

Dufaux in order to obtain a transmission of code from a remote source to perform

the aforementioned method. One would have been motivated to combine

Dufaux and Snook for reasons explained in the rejection of Claim 15, *supra.*

As in Claim 20, Snook teaches a media handling system in which

candidate video sequences are displayed on a display screen in schematic form

for selection by a user (Fig. 3 and corresponding text), the system comprising: a

display screen for displaying representations of the candidate video sequences

for selection by a user (ref. 120), each representation including one or more

images derived from the respective video sequences (Col. 2, lines 64-66); and a

user control for defining a set of one or more of the video sequences (Col. 2, line

55-Col. 3, line 1). While Snook teaches displaying video sequences, represented

by a keyframe thumbnail, that may be for selected by a user to define a set of

one or more video sequences, they fail to show the detector to detect human

faces in the candidate video sequences to represent the candidate video

sequences as a keyframe as recited in the claims. In the same field of the

invention, Dufaux teaches a media handling system similar to that of Snook. In

addition, Dufaux further teaches detector to detect human faces in the candidate

video sequences (Fig. 5, ref. 500 and corresponding text); and assigning them as

the key frame representations of the candidate video sequences (Col. 4, lines 4-7). It would have been obvious to one of ordinary skill in the art, having the teachings of Snook and Dufaux before him at the time the invention was made, to modify displaying video sequences, represented by a keyframe thumbnail, that may be for selected by a user to define a set of one or more video sequences taught by Snook to include the detector to detect human faces in the candidate video sequences and assigning them as the key frame representations of the candidate video sequences of Dufaux, in order to obtain a detector to detect human faces in candidate video sequences, displaying video sequences, represented by an image representing human faces derived from the respective video sequences, that may be for selected by a user to define a set of one or more video sequences. One would have been motivated to make such a combination because a way for the system to select a more relevant, user friendly representative image would have been obtained, as taught by Dufaux.

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar video editing and keyframe selection techniques as well as methods for detecting human faces within video.
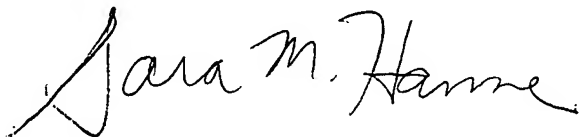
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara M. Hanne whose telephone number is (571) 272-4135. The examiner can normally be reached on M-F 7:30am-4:00pm, off on alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WEILUN LO can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

smh   *Sara M. Hanne*